

IN THE CLAIMS

1. (Cancelled)

2. (Currently Amended) An ion implantation equipment comprising

an ion source,

a mass separation means to extract so as to separate an ion beam having a specified mass from a plurality of ion beams by applying a magnetic field so as to deflect said ion beams generated from said ion source,

a scanning means for scanning the ion beam extracted by said mass isolation means by adding a magnetic field changing in magnetic field strength over time, and

an angle correction means for correcting a scanning angle in a scanning surface of said ion beam by adding said magnetic field changing in magnetic field strength thereof over time to said ion beam scanned by said scanning means so as to correctly irradiate said ion beam into an implantation target, wherein

said magnetic field strength added by said angle correction means is simultaneously changed corresponding to said magnetic field strength added by said scanning means.

3. (Previously Amended) An ion implantation equipment as defined in claim 2, wherein

    said scanning means puts together a scanning surface of said ion beam with a deflection surface of said ion beam deflected by said mass separation means.

4. (Previously Amended) An ion implantation equipment as defined in claim 2, wherein

    said scanning means comprises an electromagnet for scanning to provide said magnetic field to said ion beam extracted by said mass separation means, a control signal generation means for said scanning to generate a control signal for said scanning, and a scanning electric current control means to change magnitude over time of said electric current flowing into said electromagnet responding to said control signal for said scanning, and

    said angle correction means comprises an electromagnet for angle correction to provide said magnetic field to said ion beam scanned by said scanning means, a control signal generating means for angle compensation to generate a control signal for said angle correction, and an angle correction electric current control means to change magnitude over time of said electric current flowing into said

electromagnet for said angle correction responding to said control signal for said angle correction.

5. (Previously Amended) An ion implantation equipment as defined in claim 2, wherein

    said scanning means comprises an electromagnet for scanning to provide said magnetic field to said ion beam extracted by said mass separation means, a control signal generation means for said scanning to generate a control signal for said scanning, and a scanning electric current control means to change size in time of said electric current flowing into said electromagnet responding to said control signal for said scanning, and

    said angle correction means comprises an electromagnet for angle correction to provide said magnetic field to said ion beam scanned by said scanning means, a control signal generating means for angle compensation to generate a control signal for said angle correction, a phase control means to move a phase of said control signal for said angle correction 180 degrees to said control signal for said scanning, and an angle correction electric current control means to change magnitude over time of said electric current flowing into said electromagnet for said angle correction

responding to said control signal for said angle correction being controlled said phase by said phase control means.

6. (Previously Amended) An ion implantation equipment as defined in claim 2, wherein

    said scanning means comprises an electromagnet for scanning to provide said magnetic field to said ion beam extracted by said mass separation means, a control signal generation means for said scanning to generate a control signal for said scanning, and a scanning electric current control means to change size in time of said electric current flowing into said electromagnet responding to said control signal for said scanning, and

    said angle correction means comprises an electromagnet for angle correction to provide said magnetic field to said ion beam scanned by said scanning means, a control signal generating means for angle correction to generate said control signal for said angle correction 180 degrees to said control signal for said scanning, and an angle correction electric current control means to change magnitude over time of said electric current flowing into said electromagnet for said angle correction responding to said control signal for said angle correction.

7. Cancelled.

8. (Currently Amended) An ion implantation method comprising the steps of

applying a magnetic field so as to deflect said ion beams generated from an ion source,

extracting so as to separate an ion beam having a specified mass from plurality of ion beams,

scanning the ion beam ~~extracted by said mass isolation means~~ by adding a magnetic field changing in magnetic field strength over time, and

correcting a scanning angle in a scanning surface of said ion beam by adding said magnetic field changing in magnetic field strength thereof over time to said ion beam scanned so as to correctly irradiate said ion beam into an implantation target, wherein

said magnetic field strength added to correct said scanning angle is simultaneously changed corresponding to said magnetic field strength added to scan the ion beam.